

## Literature

A. R. Pittaway: *The Hawkmoths of the Western Palaearctic*. 240 pp., 20 colour plates, 60 text figs. and 58 maps. — Harley Books in association with The Natural History Museum, London. ISBN 0-946589-21-6. Price GBP 55.

A splendid book on the Sphingidae of the "western palaeartic", an area which in this book has its "clearly defined" eastern border not in the Ural mountains as usual, but in "the vast inhospitable swamps, forests and cold deserts of central Siberia". The swamps of the western Siberian lowlands may be inhospitable, but the forests are suitable for Lepidopteran species and the deserts (at least in summer) are not cold. The Russians consider River Yenisey to be the border of the east- and west-palaeartic; it is situated on the eastern border of "the vast inhospitable swamp". On the other hand, in the south-eastern parts of the area important sections of central Asia are included. Basically, though, the boundaries are 30°W, 80°N, 80°E and the Tropic of Cancer in the south.

In this considerably large area, 57 species and 29 subspecies of Sphingidae are recorded. The taxonomical problems of the family within this area are minor. The most complicated is the *Hyles euphorbiae* – *tithymali*-group. They are considered to be two distinct species having several subspecies. The division seems very logical and natural, based upon morphology, commonly accepted zoogeographical theories and even cross-breeding. It is rare for an author to have so much of his own field-work on which to base taxonomic decisions. The systematic part is, as a result, in scientific order, showing no "dilettantism". Each species and subspecies are illustrated with colour photographs. The text for each species contains the following chapters: adult description and variation, adult biology, flight-time, early stages (ovum, larva and pupa), parasitoids, breeding (hints for each species) and distribution (containing data from outside the western Palaearctica as well).

The book is divided into three major parts. The first is an extended introduction to Sphingidae. This includes the introduction of the book, a historical account of the study of Sphingidae (with a catalogue of regional faunistic literature), life history (with all developmental stages), adult biology, adult morphology and sphingid ecology (with a table of parasitoids). All topics are handled very thoroughly and scientifically.

The second part is the one on systematics, beginning with a chapter on classification, which in Sphingidae is without major problems. The classification follows Hodges (1971). A table of all known hybrids is represented here. In addition, there are beautiful photographs of habitats with lists of their species, as well as photos of ovae, larvae and adults in their natural circumstances. The chapter "Western Palaearctic Species of Sphingidae" begins with the checklist, followed by a systematic treatment of the species.

The third, and final part, consists of the following appendixes: App. 1. Rearing hawkmoths. A full guide to the rearing of Sphingidae, from pairing to the emergence of the F<sub>1</sub>-generation. There is also a somewhat strange chapter on suppliers of sphingid livestock, actually giving eight firms from around the world that sell live sphingids. App. 2. Hostplants. App. 3 is an alphabetical list of places mentioned in the text according to geographical region. App. 4. A glossary of the morphological nomenclature.

This A4-sized book is a bit expensive at £55,00 but can be recommended to anyone needing a hawkmoth identification or collecting guide.

Jukka Jalava